

## AMENDMENTS

In the Claims

Claims 1-57 (Cancelled)

58. (new) An apparatus for monitoring an oxygen partial pressure in an air mask adapted to deliver oxygen system to an operator, the air mask having an interior surface, the apparatus comprising:

a sensor positioned within the air mask, mounted on the interior surface of the air mask, and capable of providing an output signal corresponding to the oxygen partial pressure within the air mask;

a comparator connected to the sensor and configured to compare the output signal with a reference signal corresponding to a desired oxygen partial pressure;

a power source connected to the sensor and the comparator, the power source being independent of the oxygen system; and

a vibrating motor, of the type having a rotatable, eccentric mass, mounted within the air mask, connected to the comparator, and attached to the interior surface of the air mask, the vibrating motor comprising means for vibrating the air mask if the generated signal is determined to be lower than the reference signal, for generating a tactile warning on the face of the operator to alert the operator of a potentially hypoxic condition.

59. (new) The apparatus of Claim 58, the air mask being associated with an aircraft radio audio system having a microphone positioned within the mask, wherein:

the vibrating motor comprises means having sufficient mechanical vibration to break the microphone VOX and produce a warning tone through the aircraft audio system.

60. (new) The apparatus of Claim 58, wherein the comparator and power source are mounted within the air mask.

61 (new) An apparatus for monitoring an oxygen partial pressure in an air mask adapted to deliver oxygen system to an operator, the air mask having an interior surface, the apparatus comprising:

a sensor positioned within the air mask and capable of providing an output signal corresponding to the oxygen partial pressure within the air mask;

a comparator connected to the sensor and configured to compare the output signal with a reference signal corresponding to a desired oxygen partial pressure;

a power source connected to the sensor and the comparator, the power source being independent of the oxygen system; and

tactile warning means, connected to the comparator and attached to the air mask, for vibrating the air mask, if the generated signal is determined to be lower than the reference signal, with sufficient force to generate a tactile warning on the face of the operator to alert the operator of a potentially hypoxic condition.

62. (new) The apparatus of Claim 61, wherein the tactile warning means is mounted within the air mask and connected to the interior surface of the air mask.

63. (new) The apparatus of Claim 61, wherein the tactile comparator and power source are mounted within the air mask.

64. (new) An apparatus for monitoring an oxygen partial pressure in an oxygen mask of an oxygen system of an aircraft, comprising:

a sensor positioned within the air mask and capable of providing an output signal corresponding to the oxygen partial pressure in the air mask;

a comparator connected to the sensor and configured to compare the output signal with a reference signal corresponding to a desired oxygen partial pressure;

an amplifier connected to the sensor and the comparator and configured to amplify the output signal;

a power source connected to the sensor and the comparator, the power source being derived from a communications cord of the aircraft; and

a vibrating motor connected to the comparator and attached to a surface of the air mask, the vibrating motor configured to vibrate if the generated signal is determined to be lower than the reference signal, the vibrating motor comprising means for vibrating the air mask to generate a tactile warning on the face of an operator sufficient to alert the operator when in a hypoxic condition.

65 (new). An apparatus for monitoring oxygen partial pressure in an air mask of the type adapted to supply oxygen to a user aboard an aircraft, comprising:-

a sensor positioned within the air mask and capable of providing an output signal corresponding to the oxygen partial pressure directly within the air mask;

a comparator connected to the sensor and configured to compare the output signal with a reference signal corresponding to a desired oxygen partial pressure;

a power source connected to the sensor and the comparator, the power source being independent of the oxygen system; and

a vibrator connected to the comparator and configured to vibrate if the generated signal is determined to be lower than the reference signal, the vibrator comprising means for providing a tactile warning on the face of an operator sufficient to alert the operator when in a hypoxic condition.

66. (new) A method of monitoring an oxygen partial pressure in an air mask of an oxygen system adapted to be worn by an operator, comprising:

generating a signal corresponding to the oxygen partial pressure in the air mask, the signal generated independently of the oxygen system;

comparing the generated signal with a reference signal corresponding to a desired oxygen partial pressure; and

creating a tactile warning on the face of an operator to alert the operator of a potentially hypoxic condition by vibrating a portion of the air mask if the generated signal is determined to be lower than the reference signal.

67. (new) The method of Claim 66, further comprising providing a vibrator having a rotatable eccentric element, the vibrator being connected to the air mask, wherein the step of

creating a tactile warning on the face of the operator comprises vibrating the air mask by activating the vibrator in contact with the mask.